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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,581	08/07/2003	Mark R. Easter	110938-00165	8314
27557	7590	03/09/2005	EXAMINER	
BLANK ROME LLP 600 NEW HAMPSHIRE AVENUE, N.W. WASHINGTON, DC 20037			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,581

Applicant(s)

EASTER, MARK R.

Examiner

Chau N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Drawings***

1. The drawings are objected to because they do not have proper cross-section hatching according to MPEP section 608. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

1. The abstract of the disclosure is objected to because it contains more than one paragraph and phraseology often used in patent claims, "comprising" in line 1. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 10, 44 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 44 appear to be incomplete.

Claim 52 depends on claim 55 which is a later claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 11-19, 35-37 and 45-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Marciano-Agostinelli et al. (5,010,209).

Marciano-Agostinelli et al. discloses a self-healing cable comprising a conductor (2) and a water-swallowable composition surrounding the conductor, the composition comprising a substantially non-water swallowable polymer and a water-swallowable filler admixed to the polymer, wherein the filler is selected from cellulose ester or acrylic resins (col. 4, line 22 through col. 5, line 25) (re claims 1&35).

Marciano-Agostinelli et al. also discloses the conductor comprising a plurality of wires (re claims 11&45), the composition (3) directly surrounding the conductor (re claims 12, 17, 46, 51), the composition filling the interstices between the wires (re claims 13&47), the composition (7) being disposed between two polymeric sheets (5 and 10) (re cls 14&48), the composition (3) being surrounded by an insulator (5) (re cls 15, 18, 49, 52), an insulator (5) being disposed between the conductor (2) and the composition (7) (re cls 16, 19, 50, 53).

Re claims 2-3, and 36-37, the filler of Maricano-Agostinelli et al. are capable of casing a swelling of the composition from 5 to 200 percent by weight since it comprises material as claimed.

6. Claims 20, 26-28, 32, 33, 54, 60-62, 64, 66 and 67 are rejected under 35 U.S.C. 102(b) as being anticipated by Arroyo et al. (5,373,100).

Arroyo et al. discloses a self-healing cable comprising a conductor and a water-swellaable polymer (42) surrounding the conductor (re cls 20, 54). Arroyo et al. also discloses the conductor comprising a plurality of wires (re cls 26, 60), the water-swellaable polymer directly surrounding the conductor (re cls 27, 32, 61, 66), the water-swellaable polymer filling the interstices of the wires (re cls 28, 62), a polymeric sheet (28) surrounding the water-swellaable polymer (re cls 33, 64, 67).

7. Claims 20, 29-31, 34, 54, 63, 65 and 68 are rejected under 35 U.S.C. 102(e) as being anticipated by King (6,215,070).

King discloses a cable comprising a conductor and a water-swellaable polymer (6) surrounding the conductor (re cls 20, 54). King also discloses the water-swellaable polymer being disposed between two polymeric sheets (3 & 8) (re cls 29, 63), the water-swellaable polymer being surrounded by an insulator (8) (re cl. 30), an insulator (3) being disposed between the conductor and the water-swellaable polymer (re cls 31, 65), a polymeric sheet (3) separating the conductor and the water-swellaable polymer (re cls 34, 68).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 4 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marciano-Agostinelli et al.

Re claims 4 and 38, it would have been obvious to one skilled in the art to choose suitable viscosity for the composition taught by Marciano-Agostinelli et al. to meet the specific use of the resulting cable since it has been held that where the general conditions of a claim are disclosed in prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

10. Claims 5-7 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marciano-Agostinelli et al. in view of Haman (5,663,230).

Marciano-Agostinelli et al. discloses the invention as claimed including the filler being presented in an amount of 20 to 50 percent by weight but does not disclose the filler being sodium bentonite.

Haman discloses a water stop composition comprising sodium bentonite. It would have been obvious to one skilled in the art to use sodium bentonite for the filler of the Marciano-Agostinelli et al. composition since sodium bentonite has a relatively high swelling as taught by Haman (col. 3, lines 63-64).

11. Claims 8, 9, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marciano-Agostinelli et al. in view of Foulger (6,331,353).

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Marciano-Agostinelli et al. discloses the invention as claimed including the filler being presented in an amount of 2 to 20 percent by weight but does not disclose the filler being sodium polyacrylate.

Foulger discloses a filling compound comprising a water-swellaable filler which sodium polyacrylate (col. 10, line 41). It would have been obvious to one skilled in the art to use the sodium polyacrylate as taught by Foulger for the filler of the Marciano-Agostinelli et al. composition since sodium polyacrylate is a known water-swellaable material.

12. Claims 21-25 and 55-59 rejected under 35 U.S.C. 103(a) as being unpatentable over Arroyo et al. in view of Haar, Jr. et al. (5,998,492).

Arroyo et al. discloses the invention as claimed except for the polymer being polyethylene oxide. Haar, Jr. et al. discloses an invention relating to a super-absorbing network. Haar, Jr. et al. discloses polyethylene oxide is a well-known water-swellaable polymer (col. 1, lines 31-35). It would have been obvious to one skilled in the art to use polyethylene oxide for the water-swellaable polymer of Arroyo et al. since polyethylene oxide is a well-known water-absorbing polymer as taught by Haar, Jr. et al.

Re claims 22-25 and 56-59, it would have been obvious to one skilled in the art to choose suitable molecular weight and melt index for the polyethylene oxide in the modified Marciano-Agostinelli et al. cable to meet the specific use of the resulting cable since it has been held that where the general conditions of a claim are disclosed in prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

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Cited Art

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 56-33032 discloses a water absorbing composition.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
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